

EXHIBIT J

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IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

HONEYWELL INTERNATIONAL INC. and
HONEYWELL INTELLECTUAL PROPERTIES
INC,

Plaintiffs,

C.A. No. 04-1338-KAJ

v.

(Consolidated)

APPLE COMPUTER, INC., et al.,

Defendants.

DEPOSITION OF ROBERT D. SMITH-GILLESPIE

VOLUME I, PAGES 1 - 355

FEBRUARY 28, 2008

(The following is the deposition of ROBERT
D. SMITH-GILLESPIE, taken pursuant to the Federal
Rules of Civil Procedure, via videotape, at the
offices of Oblon, Spivak, McClelland, Maier &
Neustadt, 1940 Duke Street, Alexandria, Virginia,
commencing at approximately 9:01 a.m. on February 28,
2008.)

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1 experience.

2 Q. Is that experience disclosed in your
3 original expert report or your supplemental --

4 A. No.

5 Q. -- expert report?

6 All right. So what I was getting at before
7 was you said it depended on the type of experience you
8 had; right?

9 A. Correct.

10 Q. Okay. So my question was this: Somebody
11 with two years of experience could have different
12 experiences than somebody with five years of
13 experience; right?

14 A. That's correct.

15 Q. Okay. Somebody of five years' experience
16 could hypothetically have been stuck writing change
17 orders for those five years; isn't that true?

18 A. Not per the definition that I've presented
19 for one of ordinary skill. And --

20 Q. Okay. We'll get to that later, sir, but
21 that's my question for now. Isn't it possible that
22 the person of five years could also have limited types
23 of experience?

24 MR. OLLIS: Objection, form.

25 A. Of course it's possible.

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1 Q. Okay. Because that's the difference between
2 quantitative and qualitative; correct?

3 A. I don't know. Yeah, sure.

4 Q. All right. Give me one moment here.

5 All right. Can I have you turn to paragraph
6 77 and 78 of your original report.

7 In paragraph 77 you're saying -- you're
8 referring to the first and second lens arrays; right?

9 A. I'm just restating from -- from the patent
10 that which is in italics.

11 Q. Okay. Well in 78 you have a passage that
12 says that the first and second lens arrays are, quote,
13 members separate from the light source. Do you see
14 that?

15 A. Yes.

16 Q. That's not a quote from the '371; is it?

17 A. No, that's not.

18 Q. Okay. Where in the '371 do you find any
19 reference to the words "members separate?"

20 A. Those are my words.

21 Q. Can I have you, please, turn to paragraph
22 91. All right. The last sentence reads, "For these
23 reasons, it's my opinion that the phrase 'between the
24 said light source and said liquid crystal display' is
25 properly interpreted to mean positioned between the

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1 light source and the liquid crystal panel with an air
2 gap at the interface of the light source and one of
3 the lens arrays closest to the light source." Do you
4 see that?

5 A. Oh, I'm sorry, I was reading up above.

6 Let --

7 Give me just a second to reread that.

8 Q. And sir, my quick question is --

9 A. Okay.

10 Q. -- you're reading the element of "between
11 the light source and liquid crystal panel" to include
12 an air gap. That's correct; right?

13 A. That's correct, as the patent states in
14 column three, lines 55 through 56.

15 Q. Let me have you take a look at column six.
16 Those are the claims; right, sir?

17 A. Okay.

18 Q. All right. Where in those claims do you
19 find any reference to an air gap being a required
20 element?

21 A. The patent does not --

22 The patent claim doesn't say there's an air
23 gap, but it requires one to go and look at the
24 teachings of the specification, which say that an air
25 gap must be present.

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1 Q. Sir, my question is where in these claims do
2 you find any reference to an air gap being required?

3 A. I would say in -- what would that be, the
4 one, two, three -- fourth element where it says "first
5 and second lens arrays, each having a plurality of
6 lenslets disposed between said light source and said
7 liquid crystal panel."

8 Q. Does that say anything about an air gap,
9 sir?

10 A. It says that it's between them. It doesn't
11 say it's part of them.

12 Q. Does it say anything about an air gap?

13 A. Doesn't say anything about an air gap, but
14 it says it's between, not part of.

15 Q. Well let me ask you this question, then,
16 sir --

17 A. So optically it would be part of if there
18 was no air gap.

19 Q. What do you mean by "optically?"

20 A. Well the concept of -- of an air gap is --
21 is -- basically means that there's not optical
22 coupling. That means that the index of refraction
23 between the material -- between one material and
24 another is such that there's a -- a discontinuity.

25 Q. Just an optical discontinuity; right?

34 (Pages 130 to 133)

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1 A. In most cases what you want to do is have a
 2 high index to a low index or a low index to a high
 3 index. If you mate the two parts, quote, optically,
 4 then there would be no difference in index of
 5 refraction that would cause the scattering effects or
 6 whatever it is you're looking for.
 7 Q. When you were talking earlier about bonding
 8 materials, --
 9 A. Yes.
 10 Q. -- those are the sort of thing that you
 11 would use to mate something optically; right?
 12 A. Correct.
 13 Q. That might be some sort of an adhesive or
 14 fluid; right?
 15 A. Correct.
 16 Q. Okay. And those are the kinds of things
 17 that would eliminate any air gap; right?
 18 A. Yes.
 19 Q. Okay. An air gap, however, for the pure
 20 function -- function of functioning as an air gap just
 21 needs to have that change in the index of refraction;
 22 correct?
 23 MR. OLLIS: Objection, form.
 24 A. That -- that's true. That's the way I would
 25 define it.

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1 necessarily occur if two parts are just sitting on top
 2 of each other?
 3 A. No.
 4 Q. It could not occur; right?
 5 A. It may not occur.
 6 Q. Because it could be touching at a few points
 7 that don't provide the wet-out effect; right?
 8 A. In fact you're describing one of the
 9 techniques that's -- that's used to prevent that, is
 10 have many microscopic little points, and the higher
 11 ones will cause no -- the wet-out to not occur.
 12 Q. But they will provide sufficient change in
 13 index of refraction. I'm sorry, not the points, but
 14 there will be a sufficient change in index of
 15 refraction between the two layers; --
 16 A. That's correct.
 17 Q. -- correct?
 18 And in that circumstance there doesn't need
 19 to be any separate structure to separate the layers;
 20 does there?
 21 A. I didn't say there was -- needed to be. And
 22 you're correct, there does not need to be.
 23 Q. There just has to be sufficient change in
 24 index of refraction between the two layers.
 25 A. That's correct.

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1 Q. It can be very small; can't it?
 2 A. This --
 3 The change in index of refraction?
 4 Q. No. The size of the air gap.
 5 A. That's correct. But the --
 6 You want to make sure that your parts don't
 7 touch.
 8 Q. Why is that, sir?
 9 A. When they do touch, then you get weird
 10 optical anomalies.
 11 Q. Have you done that analysis, sir?
 12 A. Yes, I have.
 13 Q. Is it disclosed in your original report?
 14 A. It's not relative to this.
 15 Q. Well you just said it was. I want to know
 16 is it in your original report?
 17 A. No, it's not in my original report.
 18 Q. Okay. Have you --
 19 Can various points touch without providing
 20 weird optical anomalies?
 21 A. No. When they wet out -- that's the term we
 22 use. If an optical film wets out to, say -- for
 23 instance, say another optical structure, you will see
 24 a difference in performance that will be noticeable.
 25 Q. Is it your testimony that wet-out must

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1 Q. And as a practical basis, you wouldn't want
 2 wet-out to occur.
 3 A. Correct again.
 4 Q. I'm going to show you what's been previously
 5 marked as Exhibit 475. This is the June 1990 IBM
 6 technical disclosure bulletin that's listed in your
 7 list of materials considered in Appendix A of your
 8 original report; correct?
 9 A. That's correct.
 10 Q. Okay. This device that's shown in the TDB
 11 from June of 1990 contains what looks to be some sort
 12 of an optical array; correct?
 13 A. Yes.
 14 Q. It's also showing what appears to be a light
 15 source?
 16 MR. OLLIS: Objection, form.
 17 A. By that do you mean the lamp?
 18 Q. I mean the lamp.
 19 A. Okay.
 20 Q. Do you distinguish between lamp and light
 21 source, sir?
 22 A. Sometimes.
 23 Q. Such as when you're construing the claims of
 24 the '371; right?
 25 A. It -- it really depends. You could have

35 (Pages 134 to 137)

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IN THE UNITED STATES DISTRICT COURT
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HONEYWELL INTERNATIONAL INC. and
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C.A. No. 04-1338-KAJ

v.

(Consolidated)

APPLE COMPUTER, INC., et al.,

Defendants.

DEPOSITION OF ROBERT D. SMITH-GILLESPIE

VOLUME II, PAGES 356 - 515

FEBRUARY 29, 2008

(The following is the continued deposition
of ROBERT D. SMITH-GILLESPIE, taken pursuant to the
Federal Rules of Civil Procedure, via videotape, at
the offices of Oblon, Spivak, McClelland, Maier &
Neustadt, 1940 Duke Street, Alexandria, Virginia,
commencing at approximately 8:39 a.m. on February 29,
2008.)

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1 A. That's not what I stated.
 2 Q. Okay. Why don't you summarize for me your
 3 opinion regarding indefiniteness as it relates to --
 4 A. Okay. The claim that certain articles are
 5 infringing that were designed to have no rotation but
 6 because of manufacturing tolerances have upwards of a
 7 degree of misalignment of the film with the -- with
 8 some reference point, some reference on the LCD, leads
 9 me to believe that there is a -- a requirement that's
 10 not clearly specified, that someone who's trying to
 11 not infringe cannot know when he is -- is safely not
 12 infringing.
 13 Q. Right. So that depends on whether or not
 14 they intend to not infringe; --
 15 MR. OLLIS: Objection to form.
 16 Q. -- right?
 17 A. I'm -- I'm not sure that I understand that.
 18 That's --
 19 It doesn't depend on that.
 20 Q. Okay. Is it fair under your opinion to
 21 avoid infringement of the '371 patent under the guise
 22 of a manufacturing tolerance?
 23 MR. OLLIS: Objection, form.
 24 A. Could you please restate that just so I
 25 can -- I think through, now that I heard the end of

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1 it?
 2 Q. Sure. Is it fair for somebody to avoid
 3 infringement of the '371 under a pretense of a
 4 manufacturing tolerance?
 5 MR. OLLIS: Objection, form.
 6 THE REPORTER: We have 15 minutes left.
 7 A. I -- I would say that it's -- that's not
 8 fair.
 9 Q. Okay. Sir, I've reviewed your entire
 10 original supplemental report and your -- that came out
 11 wrong. I've entire --
 12 I've reviewed your entire original expert
 13 report and your entire supplemental expert report and
 14 I find no reference at all to whether or not you have
 15 an opinion as to whether or not the '371 patent was
 16 reduced to practice as of February of 1990. It's
 17 correct that that's not in either one of them; right?
 18 A. That's correct.
 19 Q. All right. And the same goes for May of
 20 1990, you have no opinion regarding that in either
 21 your original or supplemental reports.
 22 MR. OLLIS: Objection, form.
 23 A. I was not given any facts on which to base
 24 that -- an opinion.
 25 MR. SURDO: Okay. Can we take a quick

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1 break?
 2 THE REPORTER: Off the record, please.
 3 (Recess taken.)
 4 BY MR. SURDO:
 5 Q. Sir, would a device construction in --
 6 constructed in accordance with the teachings of the
 7 '371 patent work, maybe not very well, but would it
 8 work with an undistributed light source?
 9 MR. OLLIS: Objection, form.
 10 A. It depends, I guess, which -- which
 11 embodiment you're talking about. I -- I think perhaps
 12 it might work with -- with like the prismatic style as
 13 opposed to the lenticulars.
 14 Q. Did you distinguish in your experience and
 15 in your expert opinion between the fields of imaging
 16 and non-imaging optics?
 17 A. When you say do I distinguish, what do you
 18 mean? Do I know the difference?
 19 Q. Do you draw a line -- do you draw a line
 20 between the fields? Are they different?
 21 A. They're different.
 22 Q. In what ways are they different?
 23 A. Well in imaging optics, usually you have a
 24 goal of having very high resolution capability, you're
 25 able to trace rays from a source through a system and

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1 know where they're going to end up. In non-imaging
 2 optics you begin with a -- more of a -- a group of
 3 rays of random orientation and see where they end up
 4 because you don't really know, you -- you do analyses
 5 to look at probabilities of rays end -- ending up in
 6 certain places.
 7 Q. So it's fair to say that one of ordinary
 8 skill would think about those two fields differently
 9 in terms of how the light was being -- behaving or
 10 being evaluated.
 11 MR. OLLIS: Objection, form.
 12 A. And one of ordinary skill to Honeywell's
 13 definition might not even know the difference between
 14 the two.
 15 Q. Sure.
 16 What concept did you borrow from the field
 17 of -- of projection when you were building backlights
 18 in the 1989 to '92 timeframe?
 19 A. In 1989 to '92 timeframe. I was relatively
 20 new to the field and I had not had any involvement
 21 with projection displays, so I didn't draw anything
 22 from projection displays.
 23 Q. All right. How many hours have you spent in
 24 preparing both your original and -- and supplemental
 25 reports in this case?

39 (Pages 505 to 508)

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EXHIBIT K

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

HONEYWELL INTERNATIONAL INC. and
HONEYWELL INTELLECTUAL PROPERTIES
INC,

Plaintiffs,

C.A. No. 04-1338-KAJ

v.

(Consolidated)

APPLE COMPUTER, INC., et al.,

Defendants.

DEPOSITION OF ELLIOTT SCHLAM

VOLUME I, PAGES 1 - 276

FEBRUARY 19, 2008

(The following is the deposition of ELLIOTT
SCHLAM, taken pursuant to the Federal Rules of Civil
Procedure, via videotape, at the offices of Stroock &
Stroock & Lavan, LLP, 180 Maiden Lane, New York, New
York, commencing at approximately 10:06 a.m. on
February 19, 2008.)

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1 situation, would a point or line light source be
 2 sufficient to meet your definition?
 3 MR. ROSENTHAL: Objection to the form of the
 4 question.
 5 A. Is your question is the only thing that one
 6 would need would be this directional diffuser and a
 7 point source in order to get a good functional
 8 display?
 9 Q. No, no, no, sir. Different question.
 10 Here's the question. Let me try it this way. Can you
 11 create a system whereby a point a line source is used
 12 in conjunction with lenticular arrays to create what
 13 you would call a source of distributed light?
 14 A. Does your question mean without a wedge, for
 15 example?
 16 Q. Without a wedge.
 17 A. It wouldn't perform as well. You could use
 18 a line source. In fact, one of the references that is
 19 in my report does indeed do that.
 20 Q. Uh-huh.
 21 A. So to the degree that the source is
 22 distributed to begin with, it would make it better.
 23 Q. Okay.
 24 A. I would say, to use a point source, I'm not
 25 sure where you'd put the point source.

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1 Q. Uh-huh.
 2 A. You probably wouldn't have something that's
 3 very effective.
 4 Q. If you used a point source but then had some
 5 other structure to -- let me strike that.
 6 MR. WOODS: Mark this as our next exhibit.
 7 (Exhibit 476 was marked for
 8 identification.)
 9 BY MR. WOODS:
 10 Q. Do you recognize Exhibit 476 as one of the
 11 Abileah patents?
 12 A. I do.
 13 Q. And this is in particular the '783 patent;
 14 correct?
 15 A. Yes.
 16 Q. All right. Dr. Schlam, does -- does Abileah
 17 have a source of distributed light as you've defined
 18 it in paragraph 140?
 19 A. Which -- which figure would you like me to
 20 refer to?
 21 Q. Well let's -- let's look at the one right on
 22 the front.
 23 A. So on -- on --
 24 The one on the front, --
 25 Q. Uh-huh?

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1 A. -- you have basically three structures
 2 there. The structure on top is the liquid crystal
 3 panel.
 4 Q. Uh-huh.
 5 A. The structure in the middle is the
 6 lenticular diffuser, if you wish.
 7 Q. Uh-huh.
 8 A. And the structure on the bottom is the light
 9 source.
 10 Q. Okay. All right. Would you consider --
 11 When you say "the structure on the bottom,"
 12 what specific elements are you referring to?
 13 A. 98, and all of those 100's.
 14 Q. The serpentine lamp?
 15 A. Yes.
 16 Q. Okay. So anything else?
 17 A. Nothing else there on the -- in the figure,
 18 so I'd say nothing else.
 19 Q. In the case of -- in the case of 476, the
 20 Abileah reference, would you --
 21 A. I'm sorry. In the case of --
 22 Q. 476, Exhibit 476.
 23 A. Oh.
 24 Q. You have that reference?
 25 A. I'm looking at the -- okay. Fine. I was

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1 looking at the patent number. Too many three-digit
 2 numbers.
 3 Q. There are a lot of them floating around,
 4 that's for sure.
 5 A. Okay.
 6 Q. Does the fact that the lamps are not uniform
 7 have any impact upon your conclusion that that -- that
 8 that is a source of distributed light?
 9 MR. ROSENTHAL: Objection to the form of the
 10 question.
 11 A. Well as I said, a source of distributed
 12 light is light that covers the area of the liquid
 13 crystal display.
 14 Q. Uh-huh.
 15 A. So he indeed is showing light, a light
 16 source that's covering the area of the liquid crystal
 17 display. It's not uniform, by definition, but it is
 18 distributed, just not highly uniform because of the
 19 structure of the serpentine lamp.
 20 Q. At -- at what point does the lack of
 21 uniformity render a light source not distributed?
 22 A. I think that would be impossible to assess.
 23 You know, my definition is that it covers the area of
 24 the display, --
 25 Q. Well --

44 (Pages 170 to 173)

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1 A. -- so if you can see -- if you can see the
 2 lamps --
 3 If you look at that --
 4 Q. Uh-huh.
 5 A. -- display, take the lenticulars out for a
 6 moment, if you just look at that liquid crystal
 7 display, you will see the image that's impressed on
 8 that display electronically, but the brightness of
 9 that image will vary over that area.
 10 Q. Uh-huh.
 11 A. Because when you're looking at the portion
 12 of the image that's sitting right over the lamp
 13 structure, it will appear brighter than the image
 14 sitting in between the serpentines. It's still a
 15 distributed source of light, it just --
 16 You know, for certain applications it might
 17 be satisfactory, for other applications it would not
 18 be satisfactory. You wouldn't like a TV set that had
 19 that kind of distributed source of light.
 20 Q. But it is -- is -- is your definition of
 21 "distributed" -- well, strike that.
 22 Won't a line source provide the entire back
 23 surface of an LCD with light?
 24 A. It -- it will, but -- but the variation of
 25 the line source will be so extreme that it would be

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1 disa -- I would say it would be disagreeable in any
 2 application I could think of. At least in this case
 3 you have distributed the light over the area.
 4 Q. Okay. And I think we were -- before --
 5 before I showed you this most recent Abileah, we were
 6 talking about point sources and line sources, and I
 7 think, correct me if I'm wrong, you -- it's your view
 8 that you could use a point or a line source with lens
 9 arrays to create an operable device, albeit not a very
 10 good one.
 11 MR. ROSENTHAL: Objection as to form.
 12 Q. Is that fair?
 13 A. I don't think I said that.
 14 Q. All right.
 15 A. I -- I wouldn't -- I wouldn't develop or --
 16 or claim to have a good display if I just used a point
 17 source or a light -- or line source without a
 18 mechanism to distribute that light.
 19 Q. Uh-huh. Okay. And -- but it would
 20 nonetheless, if -- if lens arrays were presented -- if
 21 lens arrays were positioned between a light source or
 22 a -- try it again.
 23 If lens arrays were positioned between an
 24 LCD on one side and a point source on the other, they
 25 would still present light to the LCD and provide some

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1 degree of angular control; correct?
 2 MR. ROSENTHAL: Objection to form.
 3 A. I -- I think you're going to an extreme.
 4 Hypothetically, perhaps, but I don't think anyone
 5 would seriously consider such a working device.
 6 Q. Okay. But it would work, just not very
 7 well.
 8 MR. ROSENTHAL: Objection as to form.
 9 A. I -- I guess we'd have to define what "work"
 10 means.
 11 Q. Uh-huh.
 12 A. I mean if you turn it on, it's there. You
 13 could have no light source whatsoever and it still
 14 would work, but it wouldn't work very well either.
 15 Q. Uh-huh.
 16 A. So --
 17 Q. Would you still, if -- if you --
 18 In my hypothetical embodiment and you turned
 19 it on, would you still be able to read the LCD?
 20 A. Depending on the specific LCD and the
 21 specific intensity of the point source. You'd be
 22 aware that the LCD was on perhaps, but you might say,
 23 "I can't read what this message says" or "I can't
 24 understand this picture. I don't see what's going on
 25 there." It's on, it's working, but it's not really a

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1 display as far as I'm concerned.
 2 Q. All right. Well I'm not asking whether or
 3 not the display is --
 4 I'm just asking is -- would this be a
 5 functional device?
 6 A. If it consumes power, it's functional. But,
 7 you know, I don't know what you mean by "functional."
 8 Q. Would it -- would it provide a tailored
 9 variation with viewing angle of luminance through the
 10 LCD?
 11 A. So we're adding the lenticulars in now.
 12 Q. That's always -- that's been my assumption
 13 throughout the course of --
 14 A. So you're saying if we have a point source
 15 of light --
 16 And where are we placing that point source
 17 of light?
 18 Q. The point source of light is on one end, LCD
 19 is on the other, and in between --
 20 A. Where is the point --
 21 Q. -- are two lens arrays.
 22 A. -- source of light positioned in reference
 23 to the LCD?
 24 Q. Let's say directly behind it.
 25 A. Right in the center.

45 (Pages 174 to 177)

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1 Q. Direct --
 2 Right in the center.
 3 A. And what kind of point source is it? Is it
 4 a laser, is it an LED, is it an incandescent lamp, is
 5 it a fluorescent lamp?
 6 Q. Would it make a difference to your opinion?
 7 A. Absolutely.
 8 Q. All right. Why would it make a difference
 9 to your opinion?
 10 A. Because its depends on how the light from
 11 that lamp is self-distributed.
 12 Q. Okay. All right. What's the -- are
 13 there --
 14 So there are certain types of point sources
 15 that are more self-distributing than others?
 16 A. Well every -- every source of light, every
 17 point source has an emission cone, an emission
 18 structure.
 19 Q. Which has the widest emission cone of the
 20 examples you've given me?
 21 A. Probably incandescent.
 22 Q. Okay. Well let's use that as our example.
 23 So let's put that type of device as our point light
 24 source, two lens arrays, and the LCD. All right?
 25 Would that be a functional device?

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1 A. I'm having trouble with the use of the word
 2 "functional." You want to drive that incandescent
 3 lamp bright enough. If you drive it too bright, it's
 4 going to heat up the LCD, it might melt the
 5 lenticulars.
 6 Q. Uh-huh.
 7 A. You know, it -- it -- it would really be
 8 difficult for me to give you a strongly conclusive
 9 answer as to what "functional" means.
 10 Q. Okay. Could you make it work?
 11 A. I could turn the liquid crystal on.
 12 Q. Uh-huh.
 13 A. I could turn the lamp on.
 14 Q. Uh-huh.
 15 A. If -- if you mean --
 16 Does that make it work?
 17 Q. And would light -- would light go through it
 18 at particular angles? Would light go through the LCD
 19 at particular angles?
 20 A. It might go through the center of the LCD.
 21 Q. Uh-huh.
 22 A. It might go through the edges of the LCD.
 23 Q. Uh-huh.
 24 A. So light might go through it --
 25 Q. Uh-huh.

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1 A. -- at certain positions. Other positions it
 2 might not.
 3 Q. Uh-huh. Okay. So you're saying it might
 4 work, it might not, you just don't know?
 5 MR. ROSENTHAL: Objection as to form.
 6 A. Does a car work if you put water in the
 7 gasoline tank? I -- what -- I don't know what you
 8 mean by "work."
 9 Q. And that's exactly the point, sir. That's
 10 my question to you. If you're telling me no, it won't
 11 work, I'm happy with that. Let's just -- let's just
 12 get that.
 13 A. In my definition of "work," it would not be
 14 a functioning display.
 15 Q. Because it wouldn't be a good display;
 16 right?
 17 A. Because it wouldn't do what you expect a
 18 display to do.
 19 Q. Now a car can go at one mile an hour or it
 20 can go a hundred miles an hour; right?
 21 A. (Nodding.)
 22 Q. Correct? You got to answer. I'm sorry.
 23 A. Yes.
 24 Q. You got to -- okay.
 25 And certainly you want a model of car that

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1 goes all types of speeds; right?
 2 A. Yes.
 3 Q. All right. But a car that goes -- can only
 4 go one mile an hour is still a car; isn't it?
 5 A. Suppose it didn't have a steering wheel.
 6 Q. I -- I hear you. But here, let me just --
 7 let's follow through on this. A car that can only go
 8 one mile an hour is still a car; isn't it?
 9 A. Yes. It's a form of transportation.
 10 Q. A Model-T and a Corvette are still both
 11 cars; right?
 12 A. Yes.
 13 Q. One's a little better depending on your
 14 point of view.
 15 A. Right.
 16 Q. All right. And so that's what I'm asking.
 17 I'm not asking whether or not the embodiment, the
 18 hypothetical embodiment I've described is -- is
 19 good --
 20 A. If you want to --
 21 Q. -- or desirable --
 22 Please, sir, just let me finish --
 23 A. I'm sorry.
 24 Q. -- and then I'll let you -- you answer.
 25 I'm not asking whether it's good or

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1 desirable or commercially appropriate, I'm just asking
2 could you put this in a lab, turn it on, and get an
3 LCD that is distributing a controlled viewing angle of
4 light transmission?

5 A. I -- I wouldn't use the terminology
6 "controlled viewing angle" because of the point nature
7 of the source.

8 You know, to go back to your analogy with a
9 car, to make a consistent analogy, this display -- the
10 one-mile-an-hour car might have a very dim display,
11 the hundred-mile-an-hour car might have a very bright
12 display, for example. You wouldn't even talk about
13 brightness of this structure that you've conceived
14 because it would be hard to call it a display to begin
15 with.

16 Q. Well not in your sense.

17 A. Not by my definition.

18 Q. Okay. So you're saying it would not be
19 functional.

20 A. I'm saying it -- by --

21 By my definition of it being a display
22 that's poor or better or whatever, it would not be
23 functional.

24 Q. It would not -- it would -- simply would not
25 work other than you'd have power running through the

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1 system.

2 A. Well the liquid crystals would be working.

3 Q. Okay.

4 A. There would be light around it.

5 Q. Would a person be able to see any type of
6 image?

7 A. A person might be able to see some image,
8 sure.

9 Q. Okay. So you could see some image.

10 A. You could see something. You could tell the
11 display was on.

12 Q. Okay.

13 A. If there was video on it, you might see
14 things that are moving.

15 Q. Okay. All right. And if -- if you changed
16 your angular position vis-a-vis that LCD, the
17 luminance would be different depending upon the
18 structure of the lenticulars; right?

19 A. Well depending on the nature of the liquid
20 crystal panel and depending on the nature of the point
21 light source, everything would control that brightness
22 at different angles, yes.

23 Q. Okay. All right. Would you --

24 In order to fully assess this hypothetical,
25 would you also need to know the level of additional

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1 diffusing effect of the lens arrays?

2 A. In -- in your hypothetical, the components
3 of the lens arrays I don't think would be very
4 important.

5 Q. Okay. Is it -- is it your testimony that --
6 or is it your understanding that these lens arrays of
7 the type that are discussed in the '371 do not provide
8 some -- some diffusing effect as opposed to angular
9 effect?

10 MR. ROSENTHAL: Object to the form of the
11 question.

12 A. No, I -- I don't take exception to what's
13 said in -- in that paragraph that we read. It -- it
14 may provide some diffusing effect.

15 Q. Okay. And is it possible to create a lens
16 array that has more diffusing effect than less?

17 A. Yes. If your -- if your main objective was
18 diffusing effect, you could create a system using lens
19 arrays to improve -- to create a level of diffusion
20 which you may be happy with. It would be a
21 combination of the lens arrays, the light source, the
22 spacing between them, and, you know, it would -- it
23 would be a design to -- to do that.

24 Q. Okay.

25 A. And we're talking about spatial diffusion

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1 there, not the light tapering that we talked about.

2 Q. Correct. Correct. Of the type that was
3 referenced in column five of the '371 patent.

4 A. The -- the -- the additional diffusion
5 effect.

6 Q. The additional.

7 A. Yeah.

8 Q. All right. Okay. So given all those things
9 in our hypothetical, it is -- the end result would be
10 a display where the viewer could see some type of
11 image, possibly some moving images, and would sense as
12 they move their head in different angles different
13 degrees of luminance.

14 A. You're talking about the model that you put
15 together.

16 Q. Correct.

17 A. They might not be able to tell that a head
18 is there.

19 Q. No, no. I'm talking about a person as they
20 move their head at different angles. They will see
21 different brightness --

22 A. If they move their head at different angles,
23 they're going to see different things, yes.

24 Q. All right. Okay. With regard to our
25 discussion of Abileah and your identification of the

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1 source of distributed light as -- as simply elements
 2 98 and 100, I just want to make sure I understand that
 3 you do not equate a spatially uniform -- or you do not
 4 put -- let me try it this way. Forgive me.
 5 The source of distributed light doesn't
 6 necessarily mean spatially uniform.
 7 A. In my definition it doesn't. When one makes
 8 a source of distributed light, one wants it to be
 9 spatially uniform.
 10 Q. Uh-huh. That's part of what Abileah is
 11 talking about --
 12 A. Yes.
 13 Q. -- in terms how do you make -- how do you
 14 make light sources more spatially uniform; right?
 15 A. Yes. In -- in this particular patent I
 16 don't recall what his main thrust is. He's obviously
 17 trying to taper the light, make a directional
 18 diffuser. So I don't recall what his main stress is
 19 here, but certainly those lenticulars you can say
 20 provide two functions like -- like is said in '371.
 21 Q. You understand that those -- those
 22 lenticulars are creating essentially a double image of
 23 the light -- of the actual pipe of the serpentine
 24 lamp --
 25 A. You could look at it that way.

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1 Q. -- to fill in the -- the dark gaps.
 2 A. That's Abileah's explanation. You don't
 3 have to look at it that way, but you could use that as
 4 an explanation of why it's sort of creating this
 5 spatial uniformity.
 6 MR. ROSENTHAL: Just to -- I'm a little
 7 concerned. When we talk about Abileah, there are two
 8 Abileah patents there on the table.
 9 MR. WOODS: Uh-huh.
 10 MR. ROSENTHAL: Are you limiting your
 11 questioning to the '783 patent?
 12 MR. WOODS: For right now, yes.
 13 MR. ROSENTHAL: All right. So just -- so
 14 when you say Abileah here, you're referring to Exhibit
 15 476.
 16 MR. WOODS: Correct. Correct. All right.
 17 BY MR. WOODS:
 18 Q. Would -- is --
 19 Now in your supplemental report you did some
 20 testing; correct? You did some testing of lens
 21 arrays; right?
 22 A. Yes.
 23 Q. All right. And we'll talk in more detail
 24 about that.
 25 What type of illumination did you use for

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1 those tests?
 2 A. I used a point light source.
 3 Q. Okay. So you used a -- what, a laser?
 4 A. A laser, laser pointer.
 5 Q. Okay. So to -- to prove --
 6 And I believe you were trying to comment
 7 upon some things that Dr. Lewin put in his report; --
 8 A. Yes.
 9 Q. -- is that fair?
 10 And we'll get to that too.
 11 A. Okay.
 12 Q. I want some time to talk about that. But in
 13 order to work up your test and to respond to those
 14 arguments, you used -- what were they, just BEF films?
 15 A. They were BEF II films.
 16 Q. BEF II films. And you used a point source
 17 laser.
 18 A. That's correct.
 19 Q. Okay. You didn't use a distributed -- a
 20 source of distributed light?
 21 A. No, I didn't.
 22 Q. Okay.
 23 MR. WOODS: This is probably a good breaking
 24 point.
 25 THE REPORTER: Off the record, please.

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1 (Recess taken.)
 2 (Exhibit 477 was marked for
 3 identification.)
 4 BY MR. WOODS:
 5 Q. Sir, could you please take a look at Exhibit
 6 477. At Mr. Rosenthal's eminent suggestion, we'll add
 7 to the record the second Abileah patent, the '041
 8 patent. And you are --
 9 You have some familiarity with this patent,
 10 too, sir?
 11 A. Yes.
 12 Q. You recognize this as another Abileah patent
 13 cited in the McCartney file history?
 14 A. Yes.
 15 Q. If you could turn, please, to what is the
 16 fourth page in, it's called sheet three of four. Are
 17 you there?
 18 A. Yes.
 19 Q. Okay. Could you identify for us the source
 20 of distributed light -- or let me ask, does --
 21 Does Abileah '041 have a source of
 22 distributed light?
 23 A. Yes. I would say it's, as we were
 24 discussing earlier on the other Abileah patent, the --
 25 the twin serpentine and the reflector 298.

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1 cartoon to tell you whether there's an air gap or not.
 2 It doesn't appear so from this sketch. But, you know,
 3 I -- I wouldn't look at this and say, "Aha, you don't
 4 need an air gap."
 5 Q. But you certainly wouldn't look at it and
 6 conclude I do.
 7 A. That's correct.
 8 Q. All right. And in fact we know as a
 9 technical matter you don't; right?
 10 MR. ROSENTHAL: Objection to the form of the
 11 question.
 12 A. What's your question?
 13 Q. As a technical matter you don't need to have
 14 an air gap as long as there's an optical
 15 discontinuity; correct?
 16 A. Yes, as long as there's an optical
 17 discontinuity.
 18 Q. Okay. All right. Is it your understanding
 19 that Mr. McCartney reported his air-gap comment
 20 because the index of refraction of his diffuser and
 21 the lenticular array were the same?
 22 A. I'm not sure why he recorded that. I -- I
 23 suspect he in -- in the laboratory might have looked
 24 at a model and he might have found that when there was
 25 an air gap it worked better. I -- you know, I -- I

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1 don't know exactly why he said that, but he obviously
 2 felt very strongly about it. I mean --
 3 MR. WOODS: Let's just -- let's take stock
 4 here and go off the record.
 5 THE REPORTER: Off the record, please.
 6 (Recess taken.)
 7 BY MR. WOODS:
 8 Q. Dr. Schlamm, would you please take a look at
 9 the IBM reference, Exhibit 475.
 10 A. I have it.
 11 Q. With regard to this assembly, where is the
 12 diffus -- where is the LCD display or where would the
 13 LCD display go?
 14 A. Well it's not shown, but it would be on --
 15 on top.
 16 Q. Okay. So it would be above -- somewhere
 17 between the acrylic sheet and the -- the heading
 18 "POLARIZED BACKLIGHT FOR LIQUID CRYSTAL DISPLAY?"
 19 A. Yeah. Consider the polarized backlight
 20 heading, the LCD display.
 21 Q. Okay. So in that case what is going to
 22 happen, roughly, is that light is going to come in
 23 from the lamps, be reflected off the back of the light
 24 guide and then be sent in the direction toward the
 25 LCD. Is that fair --

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1 A. Yeah.
 2 Q. -- roughly?
 3 A. Roughly, yeah.
 4 Q. Okay. In that instance, with that type of
 5 phraseology -- or with that type of operation in mind,
 6 is it fair to say that the acrylic sheet that's shown
 7 here would be between the lamps and the LCD?
 8 A. I don't know. The lamps are on the side; --
 9 Q. Uh-huh.
 10 A. -- right? If you said is it between the
 11 light source and the LCD, I -- I'd say yes.
 12 Q. Okay.
 13 A. In this case the lamps are on the side, so
 14 technically it's not really between.
 15 Q. Uh-huh. It is -- but the light is -- or I
 16 should say the --
 17 Would it be fair to say that they are
 18 optically -- the acrylic -- the acrylic sheet is
 19 optically between the lamps and the LCD?
 20 A. I'd rather you say that it's up -- it's
 21 between the LCD and the source of distributed light.
 22 Q. Uh-huh. Okay.
 23 A. Or the light source as we've defined it for
 24 this patent.
 25 Q. Okay. Fair enough.

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1 If you could turn to pages 74 and 75 of your
 2 report, please. The original one, I'm sorry. There's
 3 a discussion in section d. on page 74 of the Matsuyama
 4 reference. Do you see that, sir?
 5 A. Yes.
 6 Q. And there is a further discussion of
 7 something called a fresnel lens within that paragraph.
 8 A. Yes.
 9 Q. Okay. In your report you write, "A Fresnel
 10 lens is an array of individual optical elements that
 11 refract -- refract light and together simulate a
 12 plano-convex cylindrical lens in a sheet form." Do
 13 you see that?
 14 A. Yes.
 15 Q. As --
 16 With your professional expertise, do you
 17 believe that is a fair definition of a fresnel lens?
 18 A. It's a description of a -- of a -- of --
 19 I just want to be accurate here. We're --
 20 we have cylindrical and linear fresnels and we have
 21 circular fresnels, so it looks like I'm describing a
 22 cylindrical fresnel or a linear fresnel rather than a
 23 circular fresnel. I haven't read this in a while.
 24 Q. Okay. What is the distinction between a
 25 circular fresnel and a linear fresnel?

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